

WHAT IS CLAIMED IS:

1. A conductive color filter, comprising a layer of carbon nanotubes covered by a colored polymeric resin binder.
2. The conductive color filter claimed in claim 1, wherein the color is black, red, green, or blue.
3. The conductive color filter claimed in claim 1, further comprising a transparent conductive electrode in electrical contact with the conductive color filter.
4. The conductive color filter claimed in claim 3, wherein the additional conductive layer is a thin metal or metal alloy.
5. The conductive color filter claimed in claim 1, wherein the conductive color filter is a layer having an electrically conductive side and an electrically insulating side.
6. The conductive color filter claimed in claim 5, wherein the electrically insulating side is formed by a sufficiently thick layer of polymeric resin binder.
7. The conductive color filter claimed in claim 3, wherein the transparent conductive electrode is indium tin oxide.
8. The conductive color filter claimed in claim 3, wherein the transparent conductive electrode is deposited upon the conductive color filter.
9. The conductive color filter claimed in claim 3, wherein the conductive color filter is deposited upon the transparent conductive electrode.

10. The conductive color filter claimed in claim 1, further comprising a reflective conductor in electrical contact with the conductive color filter.

11. The conductive color filter claimed in claim 1, employed in a flat-panel color display.

12. The conductive color filter claimed in claim 11, wherein the color is black and the conductive color filter is located in a non-emissive area of the flat-panel color display to form a black matrix.

13. The conductive color filter claimed in claim 11, wherein the color is red, green or blue and is located over a light emitting element of the display.

14. The conductive color filter claimed in claim 11, wherein the flat panel color display is an OLED display and wherein the conductive color filter is formed over a substrate.

15. The conductive color filter claimed in claim 14, wherein the conductive color filter is an anode.

16. The conductive color filter claimed in claim 14, wherein the flat panel color display is a bottom emitting OLED display.

17. The conductive color filter claimed in claim 14, wherein the conductive color filter is a cathode.

18. The conductive color filter claimed in claim 14, wherein the flat panel color display is a top emitting OLED display.

19. The conductive color filter claimed in claim 11, wherein the flat panel color display is an LCD display.

20. The conductive color filter claimed in claim 1, wherein the polymeric resin binder contains carbon black.

21. The conductive color filter claimed in claim 1, further comprising a desiccant dispersed in the polymeric resin binder.

22. The conductive color filter claimed in claim 1, wherein the conductive color filter is a layer having a thickness and is conductive through the thickness of the layer.

23. The conductive color filter claimed in claim 14, wherein the polymeric resin binder provides a protective layer for the OLED.

24. The conductive color filter claimed in claim 14, further comprising an ultraviolet filter material dispersed in the polymeric resin binder.

25. A method of making a conductive color filter, comprising the steps of:

- a) depositing a layer of carbon nanotubes onto a surface; and
- b) depositing a colored polymeric resin binder over the layer of carbon nanotubes.

26. The method claimed in claim 25, wherein the carbon nanotubes are deposited by spraying a dispersion of carbon nanotubes in a carrier fluid onto the surface and evaporating the carrier fluid from the surface.

27. The method claimed in claim 25, wherein the colored polymeric resin binder is deposited using an inkjet device.

28. The method claimed in claim 25, further comprising repeating the steps of depositing carbon nanotubes and binder in succession to increase the thickness and conductivity of the conductive color filter.

29. A method of making a flat panel display, comprising the steps of:

- a) providing a substrate having conductive elements and/or circuitry on a first portion and light emitters on a second portion of the substrate;
- b) depositing a dispersion of nanotubes in a carrier on the substrate and drying the carrier;
- c) depositing a transparent colored polymeric resin binder over the nanotubes on the second portion of the substrate; and
- d) depositing a black light absorbing polymeric resin binder over the nanotubes on the first portion of the substrate.

30. The method claimed in claim 29, wherein the display is a color display, and wherein the step of depositing a transparent colored polymeric resin binder over the nanotubes on the second portion of the substrate comprises the steps of depositing different colors of binder over different light emitters to form color pixels.

31. The method claimed in claim 30, wherein the step of depositing the transparent colored polymeric resin binder is performed with an ink jet device.